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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

05/13/2010

Fellers, Snider, Blankenship,  
Bailey & Tipples, P.C.  
Suite 1700  
100 North Broadway  
Oklahoma City, OK 73102-8820

EXAMINER

TUGBANG, ANTHONY D

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 05/13/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,688	12/15/2003	Shawn A. Ruden	STL11384	8139

TITLE OF INVENTION: A PROCESS FOR ALIGNING A DISC MEMBER ON A ROTATABLE HUB

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/13/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE** OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to:** Mail **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590 05/13/2010

Fellers, Snider, Blankenship,  
 Bailey & Tippens, P.C.  
 Suite 1700  
 100 North Broadway  
 Oklahoma City, OK 73102-8820

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,688	12/15/2003	Shawn A. Ruden	STL11384	8139

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nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/13/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
TUGHRANG, ANTHONY D	3729	029-603030

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_  
 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

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Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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Suite 1700  
100 North Broadway  
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## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 306 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 306 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability****Application No.**

10/743,688

**Applicant(s)**

RUDEN ET AL.

**Examiner**

A. Dexter Tugbang

**Art Unit**

3729

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on February 3, 2010.
2. ☒ The allowed claim(s) is/are 19 and 21 through 43.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows.

**NOTE:** After a thorough and comprehensive review of all of the claims, the following changes were necessary to correct minor informalities with the claim language. Mainly to ensure that the claim terminology was recited consistently throughout all of the claims. These changes do not affect the scope of the claimed invention.

Claims 19 and 21 through 29 and 31 through 43 have been amended as follows.

In Claim 19, --central axis of the--has been inserted after "axis for the" (line 11); and "the central axis" (line 11) has been changed to --a central axis--.

**21.** (Currently amended) The method of claim 19, wherein the disc member is characterized as a first disc member, wherein the bias force is characterized as a first bias force which is imparted upon the first disc member using the flexible cantilevered finger as a first finger of the biasing tool, and wherein the imparting step further comprises concurrently imparting a second bias force on a second disc member using a second finger of the biasing tool, the second bias force aligning a center of rotation of a second annular track on the second disc member with the central axis of the hub.

In Claim 22, --of the hub-- has been inserted after "the central axis" (line 3); and "biasing members" (line 4) has been changed to --fingers--.

In Claim 23, “biasing” (line 2) has been deleted; “biasing” (line 3) has been deleted; --of the hub—has been inserted after “the central axis” (line 5); and “biasing” (line 5) has been deleted.

In Claim 24, “said” (line 2) has been replaced with --the flexible cantilevered--.

In Claim 25, “said” (line 1) has been replaced with --the flexible cantilevered--.

In Claim 26, --flexible cantilevered—has been inserted after “wherein the” (line 1); and --flexible cantilevered—has been inserted after “distal end of the” (line 3).

In Claim 27, --of the hub—has been inserted after “central axis” (line 2); and --of the hub—has been inserted after “central axis” (line 3).

In Claim 28, --center of rotation—has been inserted before “offset has” (line 3); and --of the hub—has been inserted after “central axis” (line 5).

29. (Currently amended) The method of claim 19, wherein the hub of the providing step further supports a plurality of said disc members, and wherein the imparting step comprises advancing a first biasing tool, comprising the flexible cantilevered finger as a first flexible finger and a second flexible cantilevered finger[s], toward the central axis of the hub in a first direction so that said first and second flexible cantilevered fingers contactingly advance an upper and a lower disc member, respectively, and advancing a second biasing tool comprising a third flexible cantilevered finger toward the central axis of the hub in a second opposing direction so that said third flexible cantilevered finger contactingly advances an intermediate disc member between the upper and lower disc members.

In Claim 31, --of the rotatable hub—has been inserted after “central axis” (line 5).

In Claim 32, --of the rotatable hub—has been inserted after “the central axis” (line 3).

In Claim 33, “first biasing” (line 2) has been replaced with –cantilevered--; “biasing” line 3) has been deleted; --of the rotatable—has been inserted after “the central axis” (line 4); “first” (line 5) has been replaced with –cantilevered finger--; and “biasing members” (line 5) has been changed to –finger--.

In Claim 34, --cantilevered—has been inserted before “finger” (line 1); and –rotatable—has been inserted before “hub” (line 3).

In Claim 35, “said” (line 1) has been changed to –the cantilevered--; --portion—has been inserted after “main body”; “deflecting” (line 3) has been replaced with –contactingly engaging--; and –rotatable—has been inserted before “hub” (line 4).

In Claim 36, --cantilevered—has been inserted before “finger” (line 1).

In Claim 37, --track center—has been inserted before “offset” (line 3); and –of the rotatable hub—has been inserted after “central axis” (line 5).

38. (Currently amended) The method of claim 30, wherein the rotatable hub of the providing step further supports a plurality of said disc members, and wherein the imparting step comprises advancing a first biasing tool, comprising the cantilevered finger as a first flexible cantilevered finger and a second flexible cantilevered finger[s], toward the central axis in a first direction so that said first and second fingers contactingly advance an upper and a lower disc member, respectively, and advancing a second biasing tool comprising a third flexible cantilevered finger toward the central axis of the rotatable hub in a second opposing direction so that said third flexible cantilevered finger contactingly advances an intermediate disc member between the upper and lower disc members.

In Claim 39, --rotatable--has been inserted before "hub" (line 4); --rotatable--has been inserted before "hub" (line 5); and --of the rotatable hub--has been inserted after "central axis" (line 7).

In Claim 40, "track" (line 3) has been deleted; --of the track-- has been inserted after "rotation" (line 3); "hub" (line 3) has been deleted; and --of the hub-- has been inserted after "central axis" (line 4).

In Claim 41, "hub" (line 2) has been deleted; and --of the hub-- has been inserted after "central axis" (line 3).

In Claim 42, --central axis of--has been inserted before "hub" (line 3).

43. (Currently amended) The method of claim 30, wherein [the] a center of rotation of the annular track of the disc member is offset from the central axis of the rotatable hub by a predetermined value, wherein the bias force forms a common rotational axis for the center of rotation of the hub and the center of rotation of the annular track by displacing the disc member by the predetermined value.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 571-272-4570. The examiner can normally be reached on Monday - Friday 8:15 am - 4:45 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/A. Dexter Tugbang/  
Primary Examiner  
Art Unit 3729**

May 10, 2010